Script "nslgnss"

The script "gnssinfo.py" allows the user to view GNSS information inside a dialog-box using the Narda Script Launcher application. For each measurement, the dialog-box shows the GNSS parameters such as the date/time of the last telegram, quality, fix, the number of satellites, speed, etc. It also indicates the quality status in a separate panel.

If the GNSS quality indicators are "UNKNOWN", "NOFIX", or "FROZEN", the quality alerts are raised. In alert situations, the dialog panel displaying the GNSS information turns red, and the status label is changed.
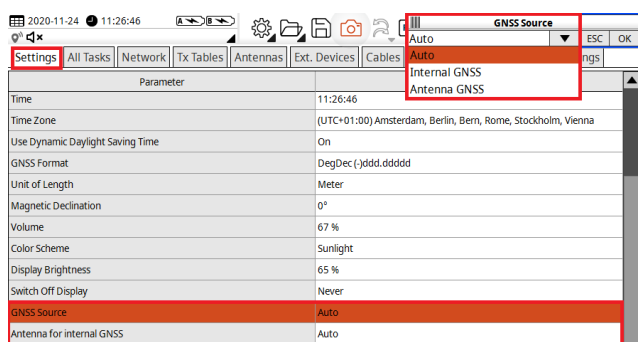
Details:

The graphical user interface for the GNSS information dialog-box is created using the wxFormBuilder tool. The python script generated for this dialog-box is provided in the file "mydialogsbase.py".

The event handling is done using the script "mydialogs.py" which is derived from the base script "mydialogsbase.py". The quality alerts for each GNSS measurement are managed in this script.
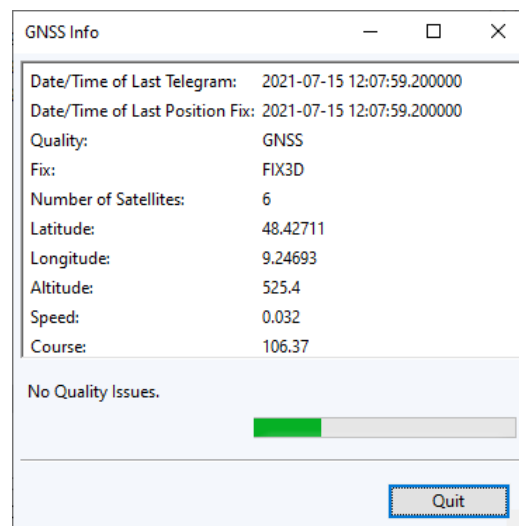
The script "gnssinfo.py" derives from the classes in the event handling script and allows the GNSS information from the Signal Shark to be parsed through the Narda Script Launcher application to the dialog for display. Multithreading is used to keep the measurements running as long as the dialog is alive.
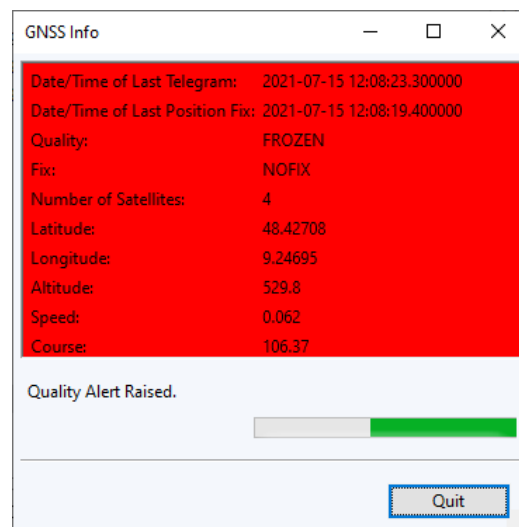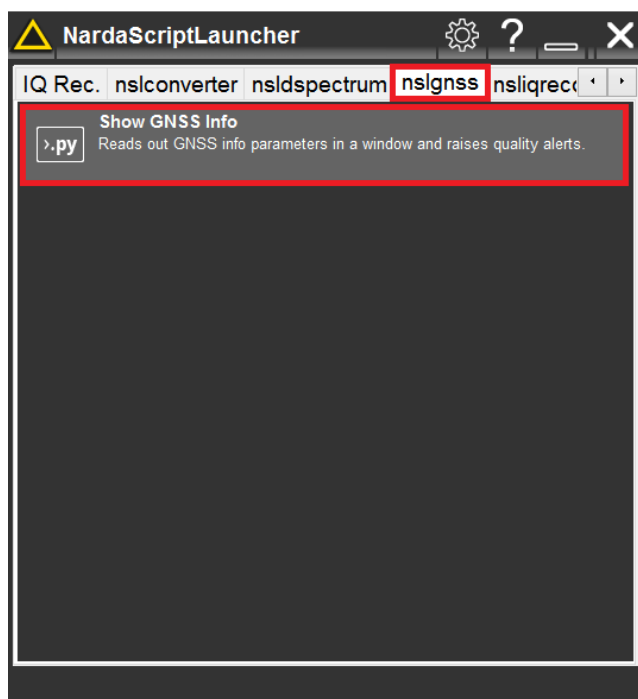
Procedure

1. To use this script, configure the GNSS antenna of the SignalShark. The user can choose between the external GNSS antenna or the internal GNSS antenna. By default, the "Auto" settings are configured for the device that can be changed as per the user preferences in the "Settings" tab of the SignalShark.

5. The alert status is given as a static text in a separate panel at the bottom of the dialog. If the GNSS quality conditions drop, the status label "No Quality Issues" appears on the dialog box:

3. Then select the script "Show GNSS Info".